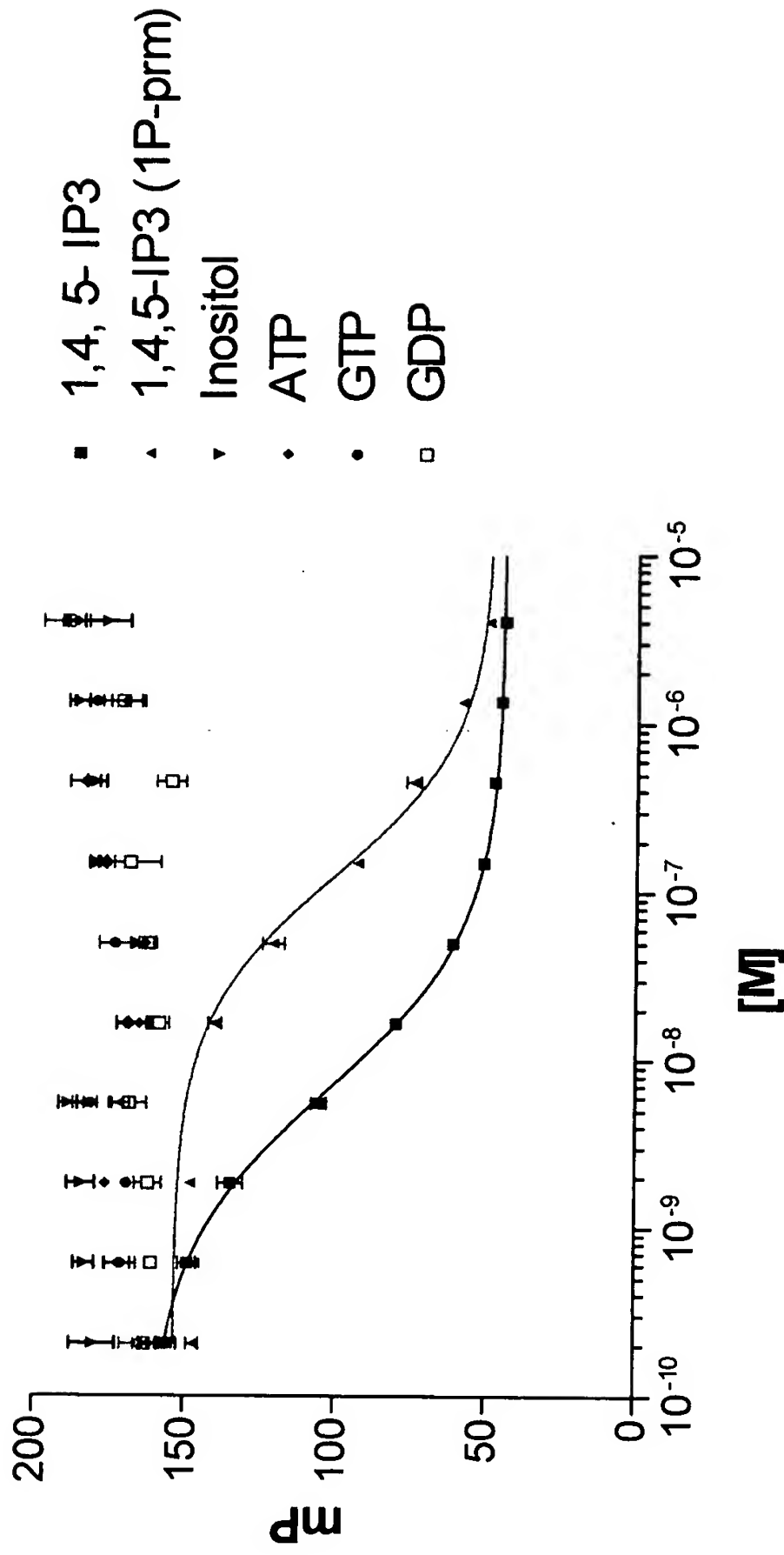


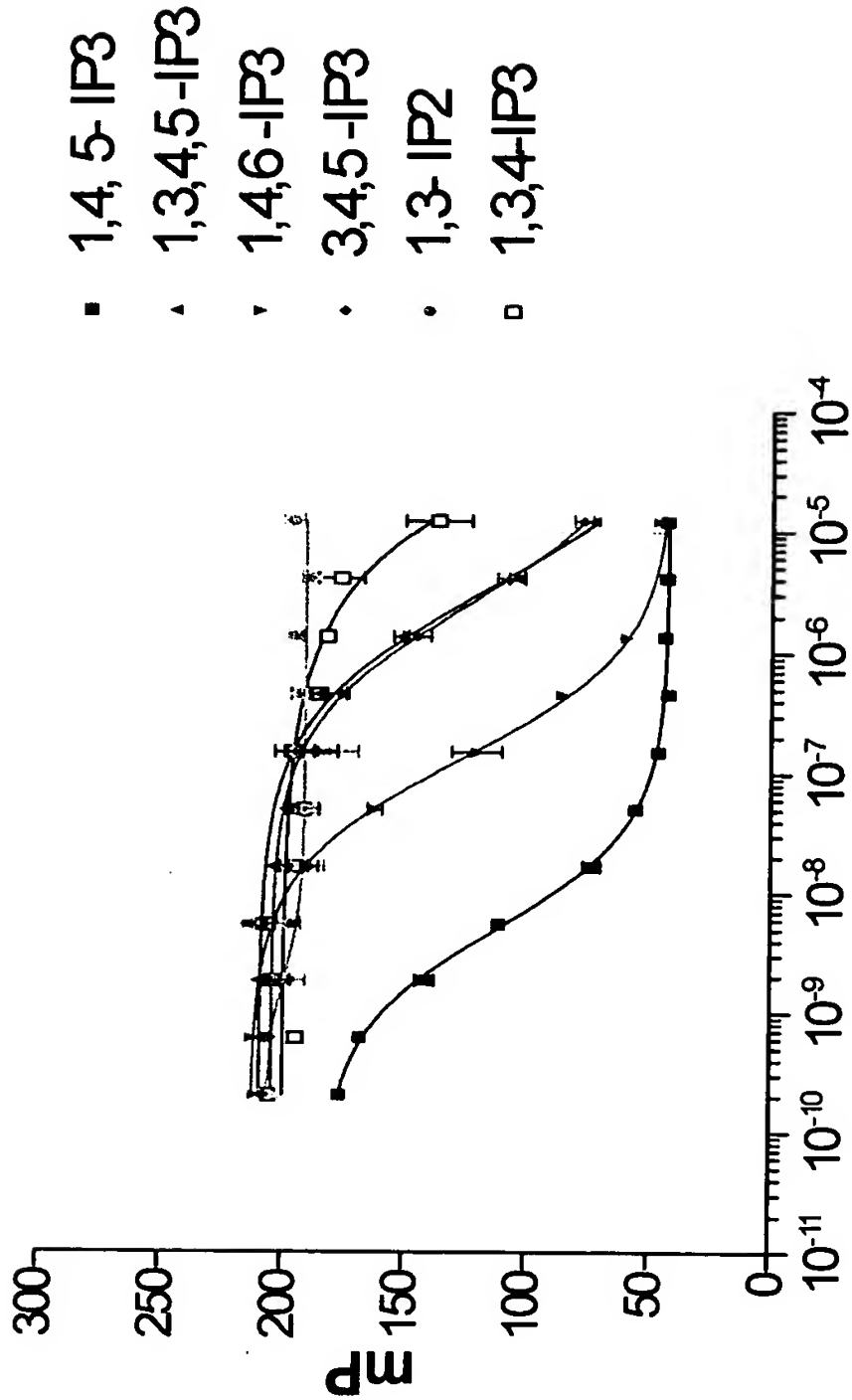
IP3 binding protein reactivity to
different IP3 derivatives and
other phosphate derivatives

2- position IP3 derivative is more potent than 1-position IP3



	1,4, 5- IP3	1,4,5-IP3 (1P-prm)
HILLSLOPE	-0.9022	-1.049
EC50	6.5740e-009	1.2410e-007

2 position IP3 derivative shows higher binding affinity than other IP3 derivatives



IP3[M]						
	1,4, 5- IP3	1,3,4,5 -IP3	1,4,6 -IP3	3,4,5 -IP3	1,3- IP2	1,3,4-IP3
HILLSLOPE	0.9961	-0.8314	-0.9278	-0.9015	-1.407	-0.6185
EC50	4.9560e-0093	1.950e-0061	1.3170e-0072	2.3320e-0061	1.9820e-0090	0.002105

Summary

- The binding protein used in this assay has 1000 times greater binding activity to IP3 than endogenous IP3R in mouse cerebellar microsomes (Refs: MikoshibaK BBRC 1999a & JBC, 2002)
- Studies using Discoverx Fluorescence polarization (FP) showed high binding affinity and selectivity of 2 position IP3 derivative when compared to other IP3 derivatives or ATP/ GTP derivatives